BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

| | |
|---|---|
| - - - - In the Matter of the Application of - - | PUC Docket 2008-0273 |
| PUBLIC UTILITIES COMMISSION | |
| Instituting a Proceeding to Investigate the Implementation Of Feed-In Tariffs | |

LIFE OF THE LAND'S

MOTION TO INTERVENE

&

CERTIFICATE OF SERVICE

HENRY Q CURTIS
VICE PRESIDENT FOR CONSUMER ISSUES

KAT BRADY
VICE PRESIDENT FOR SOCIAL JUSTICE

76 North King Street, Suite 203
Honolulu, HI 96817
phone: 808-533-3454
henry.lifeoftheland@gmail.com

November 3, 2008

Aloha Commissioners,

**Introduction**:

On October 24, 2008 the Public Utilities Commission ("Commission") filed an ORDER INITIATING INVESTIGATION re Feed-In Tariffs:

> "On October 20, 2008, the Governor of the State of Hawaii, the State of Hawaii Department of Business, Economic Development and Tourism, the State of Hawaii Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs ("Consumer Advocate"), and the HECO Companies entered into a comprehensive agreement designed to move the State away from its dependence on imported fossil fuels for electricity and ground transportation, and toward "indigenously produced renewable energy and an ethic of energy efficiency." A product of the Hawaii Clean Energy Initiative, the Agreement is a commitment on the part of the State and the HECO Companies to accelerate the addition of new, clean resources to all islands; to transition the HECO Companies away from a model that encourages increased electricity usage; and to provide measures to assist consumers in reducing their electricity bills. Included in the Agreement is a commitment by the HECO Companies to implement feed-in tariffs 'to dramatically accelerate the addition of renewable energy from new sources' and to encourage increased development of alternative energy projects. 'A feed-in[] tariff is [a] set of standardized, published purchase power rates, including terms and conditions, which the utility will pay for each type of renewable energy resource based on project size fed to the grid." (Commission Order pages 1-22)

A Feed-in Tariff (FiT) is an incentive regulatory structure designed to increase renewable energy penetration levels faster than through the traditional Renewable Portfolio Standard (RPS) approach. The modern FiT is based on the German model (1990 as amended in 2000) and adopted in several countries, and by the California Public Utilities Commission (January 2008). Whereas net metering requires one meter, FIT requires two, one to measure consumption, the other to measure generation.

Only four legislative bills have been introduced into the Hawai`i State Legislature re feed-in tariffs. In 2007 three were drafted by Erik Kvam of Zero Emissions Leasing (HB 1748, SB 1223 and SB 1609). These bills called for a 20-year $0.70/kWh feed-in

tariff for solar photovoltaic systems up to 20 MW in size. In 2008 one bill was drafted by Henry Curtis, Vice President of Life of the Land (HB 3237). This bill called for a $0.45/kWh tariff for solar photovoltaic systems.

The HECO-Consumer Advocate Agreement[1] states "The parties agree that feed-in tariffs are beneficial for the development of renewable energy" (page 16) Life of the Land believes this statement to be generally true, but recognizes that feed-in tariffs, if misapplied, can increase greenhouse gas emissions, increase costs to ratepayers, and displace other more effective renewable energy alternatives. That is, feed-in tariffs can be very effective if done right, but the devil is in the details.

Life of the Land fully supports the rapid transformation to renewable energy, but does not support the establishment of an artificial and very short timeline dropped in without any reasonable explanation as stated in the HECO-Consumer Advocate Agreement: "The parties will respectfully request that by March, 2009, the Commission will conclude an investigative proceeding to determine the best design for feed-in tariffs". (page 17) We believe that a major gigantic transformation requires a thorough review, but we will accept whatever deadlines the Commission determines to be reasonable and in the public interest.

Life of the Land is a party in the PUC docket on Wheeling (Docket No. 2007-0176). We firmly support wheeling as a way to significantly increase renewable energy penetration levels. HECO-Consumer Advocate states that the parties "agree to request Commission suspension of the current intra-governmental wheeling docket ... for a period of 12 months, with a goal of having parties review necessity of the docket" (page 17) We categorically oppose this.

---

[1] ENERGY AGREEMENT AMONG THE STATE OF HAWAII, DIVISION OF CONSUMER ADVOCACY OF THE DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, AND THE HAWAIIAN ELECTRIC COMPANIES: The signatories to this agreement are the Governor of the State of Hawaii; the State Department of Business, Economic Development and Tourism; Hawaiian Electric Company, Hawaii Electric Light Company, Maui Electric Company ("Hawaiian Electric Companies"); and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs.

The HECO-Consumer Advocate Agreement states: "the Commission will conclude an investigative proceeding to determine the best design for feed-in tariffs that support the Hawaii Clean Energy Initiative, considering such factors as categories of renewables, size or locational limits for projects qualifying for the feed-in tariff, how to manage and identify project development milestones relative to the queue of projects wishing to take the feed-in tariff terms, what annual limits should apply to the amount of renewables allowed to take the feed-in tariff terms, what factors to incorporate into the prices set for feed-in tariff payments, and the terms, conditions, and duration of the feed-in tariff that shall be offered to all qualifying renewable projects, and the continuing role of the Competitive Bidding Framework" (page 17) We believe that the KEMA approach is more thorough (see below).

The HECO-Consumer Advocate Agreement states: "If any renewable energy generated or purchased by the Utility on DOD installations, and feeding power to the grid, cannot be considered in the calculation of the utility contribution to the RPS, the RPS goals will be adjusted accordingly. (page 18) Life of the Land is unsure at this point about the merits of this section.

The HECO-Consumer Advocate Agreement states: "**Net Energy Metering (NEM) ...** The parties agree that NEM will be replaced with an appropriate feed-in tariff and new net metered installations shall be required to incorporate time-of-use metering equipment and, when time-of-use rates are implemented on a full scale basis in Hawaii or the applicable area, the net metered customer shall move to time of use net metering and sale of excess energy." (page 28) Life of the Land supports the concept of Time Of Use Rates, but they need to be priced right to send the correct signals to the market. There needs to be adequate safeguards for financially challenged individuals and families.

Erik Kvam of Zero Emissions Leasing drafted the first feed-in tariff bill for consideration by the Hawai'i State Legislature. His testimony is informative[2]:

---

[2] Erik Kvam. Testimony re Feed-In Tariffs (SB 1223 Relating to Solar Energy before the Senate Committee on Energy and Environment, February 12, 2007)

If technology and economics are diminishing barriers to large-scale solar electricity production in Hawaii, why has solar electricity not taken off in Hawaii? The main reason is the avoided cost rule at HRS section 269-27.2(c). The avoided cost rule obliges Hawaii's electric utilities to pay no more than about 8½ cents per kilowatt-hour on Oahu, and no more than about 14½ cents to 17 cents per kilowatt-hour on the Neighbor Islands, for solar electricity purchased from a solar electricity producer, even though that solar electricity is worth about 17½ cents per kilowatt-hour on Oahu, and is worth about 27½ cents per kilowatt-hour on the Neighbor Islands, where an average ratepayer pays that much for electricity supplied by the utilities. To build Hawaii's solar electricity generating capacity, a solar electricity producer needs to be compensated by the ratepayers, through the utility, at a rate, higher than the rate under the avoided cost rule, that gives the solar electricity producer an attractive return on investment in such capacity.

What Is a Feed-in Tariff? The bill sidesteps the avoided cost rule by specifying a "feed-in tariff" that the utility is obliged to pay to a solar electricity producer for solar electricity supplied to the utility over a 20 year term. The feed-in tariff is essentially a ratepayer-funded subsidy for the development of solar electricity production in Hawaii. The feed-in tariff incorporates the principle of net metering, except that a net supplier of solar electricity to the grid would be paid by the utility for such solar electricity at the legislatively set "feed-in tariff" rate over a 20 year term. The utility in turn passes through its solar electricity purchase costs to the ratepayers.

Feed-in Tariffs Work: The purpose of a feed-in tariff is to encourage private investment in Hawaii solar electricity production by setting the feed-in tariff rate so that an investor receives an attractive and predictable return on such investment over a 20-year term. The feed-in tariff has been proven in Germany to be the most cost-efficient incentive ever devised for rapid development of solar electricity production.

The German feed-in tariff for solar electricity from large rooftop systems was set in August 2004 at about .55 euros per kWh, equivalent to about 72 cents per kWh today. By the end of 2005, the German feed-in tariff had led to the installation of more than 600 MW of solar electricity generation in Germany, at a monthly extra cost of less than .30 euros, or about 40 cents, per household. The German feed-in tariff has been so successful that most of the nations of Europe, together with nations like Japan, China and South Korea and the Canadian province of Ontario, are adding feed-in tariffs to their portfolios of renewable energy incentives. ...

The Feed-in Tariff Is Cost-Efficient: The feed-in tariff is cost-efficient

because it encourages cost-efficient development, siting and maintenance of large solar power systems. Because the feed-in tariff fixes the expected revenue stream from a solar electricity project, the return from the project, to the investor, is maximized by increasing the scale of the project to decrease the cost per kilowatt-hour, to the investor, of solar electricity produced by the project. ... The feed-in tariff is cost-efficient because it is transparent. All interested parties – ratepayers, utilities, legislators and regulators – know precisely the amount and cost of the solar electricity production encouraged by the feed-in tariff, because the solar electricity is purchased by the public utility. Such transparency greatly reduces any potential for abuse of the feed-in tariff.

The Feed-in Tariff Is Flexible: Like the German feed-in tariff statute, the bill provides that the state agency responsible for electrical energy development may propose, to the legislature, adjustments in the feed-in tariff rate to reflect technological progress or market developments in solar electricity production. The transparency of the feed-in tariff means that the state energy coordinator and the legislature will have accurate information in assessing the need for any such adjustments. If it is later realized, based on the amount of new solar electricity production, that the feed-in tariff rate was either too generous, or not generous enough, in encouraging such production, the legislature could act to adjust the feed-in tariff rate in line with the proposal by the state energy coordinator. ...

A feed-in tariff would be more effective than the present Hawaii renewable energy technology tax credit in stimulating solar electricity development. ... The feed-in tariff would create jobs in Hawaii. Figures from the Solar Energy Industries Association show that each 1 MW of installed solar power supports 32 jobs, and that 8 of those jobs are created in the community where the solar power systems are installed. Such community jobs include the design, engineering, installation and maintenance of the systems.

KEMA has just submitted a paper of feed-in tariffs.[3]

Abstract: This report explores the use of feed-in tariffs for renewable electricity generation projects in California. ...

[3] **CALIFORNIA FEED-IN TARIFF DESIGN AND POLICY (Draft Consultant Report),** *Prepared For:* **CALIFORNIA ENERGY COMMISSION,** *Prepared By:* **KEMA, Inc.** September 2008 CEC-300-2008-009D

This report explores the potential approaches to expanding the use of feed-in tariffs as a mechanism to aid in making California's renewable generation objectives a reality. There are a great variety of potential feed-in tariff policy design options and policy paths. In examining options for design issues, such as appropriate tariff structure, eligibility, and pricing, this report considers policy goals and objectives, stakeholder comments on materials presented in the Energy Commission's June 30, 2008, feed-in tariff design issues and options workshop, as well as lessons learned from feed-in tariff experience in Spain and Germany.

Six representative policy paths are identified for further consideration. The pros and cons of the six policy paths are explored and analyzed in detail. Finally, the report explores the potential interaction of these policy paths, examines the interaction of feed-in tariff policies with other related policies, and discusses issues related to potential next steps.

CHAPTER 1: Introduction: Feed-In Tariffs as Renewable Energy Policy

*Benefits and Limitations:* As with other policies, feed-in tariffs provide benefits and limitations, a number of which depend upon the design of the tariff. ...

Getting the price right can be challenging. If the price is set too high, the tariff introduces the risk of overpaying and over stimulating the market. This risk may be exacerbated when the tariff is open to large projects in regions with ample resource potential. On the other hand, if the tariff is set too low to provide adequate returns to eligible projects, it may have little effect on stimulating development of new renewable energy generation. A range of approaches for setting the price are discussed in the six options considered in this report.

*Design Issues*

Proper design is critical to the success of a feed-in tariff. If the tariff rates are fixed and cannot be adjusted, for example, they may not be flexible enough to respond to changing market conditions. Moreover, some feed-in tariffs intentionally or unintentionally favor less efficient plants. As renewable energy resource potential is not uniformly distributed across California, unequal costs are likely to be incurred by interconnecting utilities, raising the issue of cost allocation. Finally, tariff quantity limitations or declining tariff price blocks may encourage speculative queuing, in which projects with no real commercial prospects detract from the success of a feed-in tariff by reserving funds that are ultimately not disbursed or are later released at a lower incentive level. Policy makers should strive to minimize such negative, unintended outcomes with careful feed-in tariff design.

Life of the Land approach to FiT issues is more in keeping with the KEMA approach. A number of issues must be dealt with in implementing a FiT. Life of the Land's list is based in part on the KEMA study and amending it to fit Hawai`i. The issues that this

docket needs to resolve are laid out in the following options:

*Generator Eligibility:*

*(a)* Resource Type (1) allow/not allow all RPS-eligible technology types; (2) allow only indigenous fuel; (3) allow imported bioenergy crops when they are refined in-state; (4) allow all imported fuel refined in foreign countries; (5) Limit biorefineries to Center of Gravity biorefineries with a set radius of locally grown crops; (6) include palm oil; (7) include geothermal; (8) include hydroelectricity; (9) include pumped storage; (10) include photovoltaic provided the facility has installed solar water heater; (11) require carbon neutral biomass (12) include all renewables with favorable life cycle analysis (13) include only the electricity that is surplus to the customer's requirements is paid under the feed-in tariff. The remainder has the same value to the customer as their retail electricity rate.

(b) Generator Eligibility—Vintage (1) include all generators, regardless of age; (2) include only new generators; (3) include only generators that came on line after a target date (c) Generator Eligibility—Project Size (1) caps (2) floors

*Price-Setting Methodology:*

Should the price based on the (a) value of the electricity supplied, (b) generation cost of eligible technologies, or (c) a competitive benchmark.

*Price Adjustment:*

*(a) The Overall* Approach. (1) fixed price with no adjustment (2) index to economic indicators (3) adjust the tariff based on a measure of value (4) set a digression schedule that would reduce the price over time in line with technology advances and scale economies, as is in place in Germany.

(b) Price adjustments based on (1) specified amount of time (2) when certain capacity amounts are reached (3) periodic administrative review

(c) Price Adjustment—How to Adjust. (1) uniform steps (2) experience curve approach

*Cap and Limitations*

(a) no cap on the policy (b) cap based on capacity (c) cap based on a target amount of energy generation (d) cap based on its cost impact.

*Tariff Differentiation*

(a) neutral regardless of technology; (b) different re generation costs and production profiles

*Contract or Payment Duration*

(a) short-term (b) medium term (c) long-term (d) indefinite.

*Access to the Grid:*

*who pays* interconnection and upstream transmission system costs associated with new generation)

*Tariff Structure*

(a) fixed price payment (b) fixed price with a tradable renewable energy credit hybrid (c) contract-for-differences structure

*Timing*

(a) take effect immediately (b) specified future date (c) triggered by a certain milestone

*Scope*

*(a) limited pilot project (b) allowed* only in specific locations (c) full market

Compatibility with other programs and laws:

(a) inclining block structure (b) time of use rates (c) greenhouse gas emission limits (d) carbon taxes (e) Equity issues re impacts on low income; (f) impact on ratepayers subscribing to a green tariff; (g) renewable energy investment zones; (h) aesthetic impact from new overhead transmission lines; (i) competitive bidding process (j) The Public Utility Regulatory Policy Act (PURPA) and Federal Energy Regulatory Commission (FERC) regulations state that utilities can only purchase power from qualifying facilities at avoided cost.

**Intervention:** This Motion to Intervene is filed according to the requirements of Hawaii Administrative Rules ("HAR") §6-61-55 Intervention[4]. (a) A person may make an application to intervene and become a party by filing a timely written motion in accordance with sections 6-61-15 to 6-61-24, section 6-61-41, and section 6-61-57, stating the facts and reasons for the proposed intervention and the position and interest of the applicant.

A person may make an application to intervene (HAR §6-61-55(a)). Life of the Land ("LOL") is a person as defined by HAR §6-61-2. LOL will be represented by LOL's Vice President for Consumer Affairs, Henry Curtis, in accordance with HAR §6-61-12.

**1) Timeliness.** Our motion to intervene is timely. The Public Utilities Commission ("Commission") opened the Feed-in Tariff docket ("Application") on October 24, 2008. Our Motion to Intervene was filed on November 3, 2008, which is within 20 days after the Application was filed.

**2) The nature of the applicant's statutory or other right to participate in the**

[4] http://www.hawaii.gov/budget/adminrules/har6-61.htm

**hearing**. We recognize that the Commission has the discretion to determine whether we are permitted to intervene in this docket.

Life of the Land (LOL) is a 38-year old non-profit organization. Our actions have heavily influenced land use policy in the state, from our 1971 lawsuit with Maui Mayor Elmer F Cravalho which successfully required the Navy to conduct an Environmental Assessment on the bombing of Kahoolawe; [5] to landmark Hawaii Supreme Court decisions on land use. [6],[7] Our influence on state history is significant: In 1995 the Honolulu Star-Bulletin ran a three special sections series reviewing four decades of Hawai`i's history: "The effect a person can have on a place is immeasurable. Here are the 10 people or organizations who, from 1965 to 1975, helped make Hawaii what it is today". The four organizations are: The state Land Use Commission; Bishop Estate; the Labor Unions; and Life of the Land.[8]

Life of the Land maintains an extensive web site on energy, produces the `Olelo Community TV series Energy and Power in Hawaii, has testified on energy before the State Legislature.

---

[5] Honolulu Advertiser: suit to seek end to Kahoolawe bombing (page 1, July 29, 1971)http://www.lifeofthelandhawaii.org/Newsletters/HA%2007.29.71%20Kahoolawe.pdfMaui News: Suit 'Reaffirms' Mayor's Kahoolawe Stand: Co-Complainant With Life of Land (July 31, 1971)
http://www.lifeofthelandhawaii.org/Newsletters/Maui%20News%2007.31.71%20Kahoolawe.pdf

[6] Life of the Land, 63 Haw. at 176-77, 623 P.2d at 441 (1981) (group members had standing to invoke judicial intervention of LUC's decision "even though they are neither owners nor adjoining owners of land reclassified by the Land Use Commission in [its] boundary review" Life of the Land, 61 Haw. at 8, 594 P.2d at 1082 (1979) (group members who lived in vicinity of reclassified properties and used the subject area for "diving, swimming, hiking, camping, sightseeing, horseback riding, exploring and hunting and for aesthetic, conservational, occupational, professional and academic pursuits," were specially, personally and adversely affected by LUC's decision for purposes of HRS ••91-14). www.state.hi.us/jud/**21124**.htm

[7] Our "fundamental policy [is] that Hawaii's state courts should provide a forum for cases raising issues of broad public interest, and that the judicially imposed standing barriers should be lowered when the "needs of justice" would be best served by allowing a plaintiff to bring claims before the court." Id. at 614-15, 837 P.2d at 1268-69 (citing Life of the Land v. The Land Use Comm'n, 63 Haw. 166, 176, 623 P.2d 431, 441 (1981)).
http://www.state.hi.us/jud/21124.htm

[8] Honolulu Star-Bulletin March 14, 1995.

**A ) Hawai`i State Constitution Article IX.**

**Section 1.** For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people.

**Section 6.** The State shall have the power to manage and control the marine, seabed and other resources located within the boundaries of the State, including the archipelagic waters of the State, and reserves to itself all such rights outside state boundaries not specifically limited by federal or international law.

**Section 7.** The State has an obligation to protect, control and regulate the use of Hawaii's water resources for the benefit of its people.

**Section 9.** Each person has the right to a clean and healthful environment, as defined by laws relating to environmental quality, including control of pollution and conservation, protection and enhancement of natural resources. Any person may enforce this right against any party, public or private, through appropriate legal proceedings, subject to reasonable limitations and regulation as provided by law.

**B ) State Environmental Policy. HRS 344**

**Section 1 Purpose.** The purpose of this chapter is to establish a state policy which will encourage productive and enjoyable harmony between people and their environment, promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humanity, and enrich the understanding of the ecological systems and natural resources important to the people of Hawaii. [L 1974, c 247, pt of §1; gen ch 1993]

**Section 2 Definitions.** As used in this chapter unless the context otherwise requires:

"Agency" means any department, office, board, or commission of the State or county government that is a part of the executive branch of that government.
"Environment" means the complex of physical and biological conditions that influence human well-being, including land, air, water, minerals, flora, fauna, energy, noise, and places of historic or aesthetic significance.

**Section 3 Environmental policy.** It shall be the policy of the State, through its programs, authorities, and resources to:
(1) Conserve the natural resources, so that land, water, mineral, visual, air and other natural resources are protected by controlling pollution, by preserving or augmenting natural resources, and by safeguarding the State's unique natural environmental characteristics in a manner which will foster and promote the general welfare, create and maintain conditions under which humanity and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of the people of Hawaii.
(2) Enhance the quality of life by: ... (D) Establishing a commitment on the part of each person to protect and enhance Hawaii's environment and reduce the drain on nonrenewable resources.

**Section 4 Guidelines.** In pursuance of the state policy to conserve the natural resources and enhance the quality of life, all agencies, in the development of programs, shall, insofar as practicable, consider the following guidelines:
(2) Land, water, mineral, visual, air, and other natural resources. (A) Encourage management practices which conserve and fully utilize all natural resources ...
(3) Flora and fauna. (A) Protect endangered species of indigenous plants and animals and introduce new plants or animals only upon assurance of negligible ecological hazard ...
(5) Economic development. (A) Encourage industries in Hawaii which would be in harmony with our environment ...

**The Hawaii Supreme Court:** [9]

**"We therefore hold that [the constitution] adopt[s] the public trust doctrine as a fundamental principle of constitutional law in Hawaii.** ... [t]he public trust doctrine applies to all water resources without exception or distinction [including surface and underground water]. ... Under the public trust and the Code, permit applicants have the burden of justifying their proposed uses in light of protected public rights in the resource. [t]he public trust effectively creates this burden through its inherent presumption in favor of public use, access, and enjoyment."

"The 'precautionary principle' appears in diverse forms throughout the field of environmental law. ... As with any general principle, its meaning must vary according to the situation and can only develop over time. In this case, we believe the Commission describes the principle in its quintessential form: at minimum, the absence of firm scientific proof should not tie the Commission's hands in adopting reasonable measures designed to further the public interest. ...

So defined, **the precautionary principle simply restates the Commission's duties under the constitution and Code. Indeed, the lack of full scientific certainty does not extinguish the presumption in favor of public trust purposes or vitiate the Commission's affirmative duty to protect such purposes wherever feasible.** ...

In furtherance of its trust obligations, the Commission may make reasonable precautionary presumptions or allowances in the public interest. The Commission may still act when public benefits and risks are not capable of exact quantification. At all times, however, **the Commission should not hide behind scientific uncertainty, but should confront it as systematically and judiciously as possible** ... We do not expect this to be an easy task. Yet it is nothing novel to the administrative function or

---

[9] IN THE SUPREME COURT OF THE STATE OF HAWAII ---oOo--- In the Matter of the Water Use Permit Applications, Petitions for Interim Instream Flow Standard Amendments, and Petitions for Water Reservations for the Waihole Ditch Combined Contested Case Hearing NO. 21309 APPEAL FROM THE COMMISSION ON WATER RESOURCE MANAGEMENT (CASE NO. CCH-OA95-1) AUGUST 22, 2000 www.state.hi.us/jud/21309op.htm

the legal process in general.

The LOL's Petition and Charter of Incorporation (December 16, 1970) states: "The organization is organized ... [to] intervene in legal matters as may be appropriate to ... conserve resources, preserve or restore natural beauty or correct environmental abuse." The LOL Board of Directors adopted Energy Policy Goals and Objectives (July 13, 1981). "Goal: To meet the State's energy needs through conservation and low-cost, non-polluting resources." LOL's Board of Directors is authorized to act on behalf of its members. On Friday, September 22, 2000, the LOL Board of Directors approved continuing to intervene in energy dockets as a means of promoting sustainable policies. Henry Curtis, Vice-President for Consumer Affairs, is authorized by the LOL Board of Directors to represent LOL before the PUC in accordance with HRS Section 6-61-12.

We have been a party in several regulatory actions including: Investigation of Restructuring (96-0493); MECO IRP-2 (99-0004); HECO IRP-3 (03-0253); HELCO IRP-3 (04-0046); HECO IRP-4 (2007-0084); HECO DSM (00-0209); Statewide DSM (05-0069); Distributed Generation (03-0371); HECO's Proposed 2009 Power Plant (05-0145); HECO's East Oahu Transmission Project (03-0417); Rate Structures (2793); Renewable Portfolio Standard penalties (2007-0008).

**3) <u>The nature and extent of the applicant's property, financial, and other interest in the pending matter</u>;** LOL is a non-profit Hawaii-based organization. Our members live, work and recreate in Hawaii. Life of the Land is concerned with many issues including those related to the environment, climate, justice, equity, and life cycle impacts. Life of the Land is a member of both the Wheeling Docket and the IRP docket, each of which will be affected by decisions made in this docket.

Life of the Land's position in Commission dockets is not limited to what many believe is the realm of traditional environmentalism: the birds and the bees, land use and toxic pollution. Rather, Life of the Land has a holistic approach which includes: (1) Transparency/Sunshine; (2) Life Cycle Social Impacts; (3) Life Cycle Environmental Impacts; and (4) Life Cycle Financial Impacts

(1) Transparency/Sunshine: The process must be open and understandable. Documents must be easily accessible, and downloadable from the web. Public input must be accepted. This includes meaningful public hearings and permitted interventions in regulatory proceedings. Environmental impact statements should be written when there are significant impacts, and they should include cumulative impacts and alternatives. Closed-door secret meetings where policy is decided is the wrong way to bring about change. The ends do not justify the means.

(2) Life Cycle Social Impacts: Solutions must be People Friendly. There must be respect for individuals, groups and communities, workers, children, women and minorities. Labor should work in a safe environmental and have the right to organize. The use of sweat shops, slave labor and union busting techniques is not acceptable. Community impacts are important in Hawai`i and also from where the feedstock is imported from.

(3) Life Cycle Environmental Impacts: Projects must promote biodiversity, and minimize climate impacts. Energy Injustice must be accounted for: the building of projects with significant environmental impacts should not be dumped in poor minority communities. Environmental impacts are important in Hawai`i, and also from where the feedstock is imported from and where the waste products are disposed. Projects must take into account the Public Trust Doctrine and the Precautionary Principle.

Public Trust Doctrine: "Most importantly, the people of this state have elevated the public trust doctrine to the level of a constitutional mandate." (Hawaii Supreme Court: In re Water Use Permit Applications 94 Haw. 97 (2000) p. 131)

Precautionary Principle: "[T]he precautionary principle simply restates the Commission's duties under the constitution and Code. Indeed, the lack of full scientific certainty does not extinguish the presumption in favor of public trust purposes or vitiate the Commission's affirmative duty to protect such purposes wherever feasible. ... In furtherance of its trust obligations, the Commission may make

reasonable precautionary presumptions or allowances in the public interest. The Commission may still act when public benefits and risks are not capable of exact quantification. At all times, however, the Commission should not hide behind scientific uncertainty, but should confront it as systematically and judiciously as possible ... We do not expect this to be an easy task. Yet it is nothing novel to the administrative function or the legal process in general. (Hawaii Supreme Court: In re Water Use Permit Applications 94 Haw. 97 (2000) p. )

(4) Life Cycle Financial Impacts: People are ratepayers and taxpayers. Least cost is a regulatory approach that seeks to minimize ratepayer impacts without analyzing taxpayer impacts. People have two pockets. Minimizing what is taken out of one pocket while ignoring what is taken out of the other pocket makes no sense. By contrast, the Consumer Advocate analyzes ratepayer but not taxpayer impacts. (Q. "What would the taxpayer (as opposed to ratepayer) impacts be from using 100% biofuels?" A. "The Consumer Advocate does not possess the knowledge or expertise to this question." (DN 05-0145, Life of the Land Question, Consumer Advocate Response re LOL-CADT-IR-41) Q. "For each dollar that HECO would spend buying ethanol, how many dollars of taxpayer money is being used to subsidize the price of ethanol? This is a key question, as the Consumer Advocate, can you support unknown taxpayer expenditures to subsidize ratepayer rates?" A. "The Consumer Advocate does not possess the knowledge or expertise to this question." (DN 05-0145, Life of the Land Question, Consumer Advocate Response re LOL-CADT-IR-42))

Balance of Payments: Replacing imported fuel with indigenous fuel has an enormous positive impact on local jobs and on economic prosperity. Each dollar that enters Hawaii causes $3-4 of local economic activity. Each dollar in Hawaii that leaves the state causes a decrease of $3-4 in local economic activity.

**4) The effect of the pending order as to the applicant's interest;** The continued use of fossil fuels, the rate of the shift to renewable energy, and the path taken significantly affects LOL and our members. Global Greenhouse gas emissions must be reduced. This docket may greatly impact the use of renewable energy but the devil is in the details. There are few public revelations about how the details will be

worked out. In California, KEMA analyzed six different paths. Each path has different impacts on people, the environment, the degree to which it would move us towards sustainable approaches, and the displacement of other solutions. It is imperative that we adopt a reasonable but effective approach to solving our energy crisis.

**5) Other Means Available Wherein Applicant May Protect His Interest.** There are no other means available to protect our interests.

**6) Other Parties Do Not Represent LOL's Interests.** The existing parties will are the fossil fuel based utilities and the Consumer Advocate which protects consumers interests. LOL represents environmental, social and holistic interests. For example, consumer and environmental issues are distinct, although they overlap. A minimal divergence is sufficient for separate representation. In most dockets that are or have recently been before the Commission, LOL's position has been significantly different from the Consumer Advocate. For example, we believe that Climate Change is a serious and immediate global crisis, while the Consumer Advocate has stated on the record that if global warming is real, any mitigation needed is decades away from needing regulatory action. We also have significant differences with regard to the use of life cycle analysis, analyzing both ratepayer and taxpayer impacts, balance of payment analysis, social impacts, environmental justice, the public trust doctrine, and the precautionary principle. A quick review of Dockets 05-0145 and 2007-0346 reveal deep rifts between the LOL and Consumer Advocate positions.

"Generally, community intervenors have been forced to rely on free legal and consulting services. Yet, they have infused we so-called 'experts' with new ideas. They have reminded us of the critical impact of essential utility services on life's basic necessities. With a modest funding source, these and other groups should be able to continue and enhance their role. Another situation where ... there are consumer groups with conflicting interests. At that point, our office is forced to select and advocate one position." Senate Bill No. 1918 (1997). Presentation of the Department of Commerce and Consumer Affairs to the Senate Committee on Commerce, Consumer Protection and Information Technology. Regular Session of 1997. February 10, 1997.

**7) LOL's Participation will Assist the Development of a Sound Evidentiary Record.** We offer a unique perspective. We intend to present a proactive case, supported by expert witnesses and exhibits, which will provide to the Commission alternate scenarios. Our participation will enable the Commission to view and consider all of the pertinent available information needed to make a sound decision.

Life of the Land's Executive Director has a particular focus on energy policy, having represented the organization in a six year regulatory proceeding before the Board of Land and Natural Resources and sixteen (16) regulatory proceedings before the Hawai`i Public Utilities Commission. He has been described as an "energy wonk" (Honolulu Weekly, November 29, 2000) who "closely follows and participates in Hawai'i energy issues" (Environment Hawaii, September 2004).

Life of the Land's Executive Director produced Community Television shows re: (1) HPU's presentation of Stanford University Climatologist and Climate Nobel laureate Dr Stephen Schneider at St. Andrew's Priory; (2) the University of Hawai`i Richardson School of Law's Climate Teach-In; and (3) the Kickoff Meeting of the Hawai`i Power & Light: An interfaith religious response to global warming

Life of the Land's Executive Director served as a Peer Reviewer on a University of Hawai`i's *Hawaii Natural Energy* Institute report on Renewable Portfolio Standards report submitted or about to be submitted to the Hawai`i Public Utilities Commission.

The University of Hawai`i Richardson School of Law's Environmental Law Program participated in the 2007 Environmental Moot Court competition. The fictional lawsuit dealt with the Province of Inuksuk (in real life the northern 1/3 of Quebec) v. U.S. Coal Companies re Sea Level Rise and Coastal Destruction of their villages due to Climate Change. LOL's Executive Director Henry Curtis and Assistant Executive Director Kat Brady served as US Appeal Court Judges in moot court practice sessions.

Life of the Land has sponsored dozens of witnesses in Hawai`i Public Utilities Commission regulatory proceedings including lawyers and Ph.D.s with specialized expertise.

As this instant docket was just filed, Life of the Land has not determined which witnesses to sponsor nor what documents to introduce. This is a reasonable approach. In fact, no party has publicly identified any witnesses they will sponsor in this docket.

**8) LOL's Participation Will Neither Unduly Broaden The Issues Nor Delay This Proceeding**. Our comments, testimonies, expert witnesses and exhibits will be provided so as to strengthen the defensibility of the PUC decision. We do not seek to muddy the waters, but rather to bring clarity to the issues at hand. We have always accommodated the numerous time extensions requested by other Parties in the dockets that we are or have been in, but we have not delayed any docket based on a request by us to delay the proceedings. Allowing intervention by LOL, the filing of our comments and questions, and granting the other relief sought in this petition, the PUC will merely place LOL in the same substantive and procedural position as the other parties to these proceedings.

While we have gone along with time extensions proposed by the Consumer Advocate and HECO, we have never requested one on our behalf, nor have we ever approached the Consumer Advocate nor HECO about extending any docket.

We have never gone beyond the issues in any docket. In the biofuel supply contract (2007-0346) HECO accused us of doing this, but they misread Commission Order 24144 which clearly stated: "The commission finds that the issues proposed by LOL are subsumed within the broad issues listed in HECO and the Consumer Advocate's proposed issues." (page 6) Subsumed means contained within, as opposed to excluded from.

**9) LOL's Interests Differ From Those Of Those Of The General Public.** The Consumer Advocate is bound by the law to represent the interests of the general public, that is, the consumers of utility services. Traditionally, they wait till all the facts are in before jumping to a conclusion. In this case, the Consumer Advocate has

agreed to a unified position with the utility. There is nothing in the existing record that indicates that any of the issues that are of concern to Life of the Land -- including those related to the environment, climate, justice, equity, and life cycle impacts -- have been analyzed.

**10) Whether the applicant's position is in support of or in opposition to the relief sought**. Life of the Land supports policies which will decrease our use of fossil fuel and decrease our greenhouse gas emission footprint. This docket is complex. We agree in part with some of it and disagree in part with other parts of it, however, in the end, it is the details that will make the final policy wise or foolish.

11) **Parties and Participants**. Life of the Land prays that the Commission has a liberal approach to admitting parties to transformational dockets associated with the Hawaii Clean Energy Initiative.

Certificate of Service

I hereby certify that I have this date served a copy by hand delivery of the foregoing Motion To Intervene by Life of the Land, in PUC Docket Number 2008-0273, upon the following parties. I have hand delivered the original and 8 copies to the PUC, and two copies to the Consumer Advocate and mailed one copy to each other party listed below.

CARLITO CALIBOSO, CHAIR
HAWAII PUBLIC UTILITIES COMMISSION
465 S King St. Suite 103
Honolulu, HI 96813

CATHERINE P. AWAKUNI
EXECUTIVE DIRECTOR
DIVISION OF CONSUMER ADVOCACY, DCCA
P.O. Box 541
Honolulu, HI 96809

DARCY L. ENDO-OMOTO
VICE PRESIDENT
HAWAIIAN ELECTRIC COMPANY
P.O. Box 2750
Honolulu, HI 96840-0001

DEAN MATSUURA
MANAGER, REGULATORY AFFAIRS
HAWAIIAN ELECTRIC COMPANY
P.O. Box 2750
Honolulu, HI 96840-0001

JAY IGNACIO
PRESIDENT
HAWAII ELECTRIC LIGHT COMPANY, INC.
P.O. Box 1027
Hilo, HI 96721-1027

EDWARD L. REINHARDT
PRESIDENT
MAUI ELECTRIC COMPANY, LTD.
P.O. Box 398
Kahului, HI 96732

RANDALL J. HEE, P.E.
PRESIDENT AND CEO
KAUAI ISLAND UTILITY COOPERATIVE
4463 Pahe'e Street, Suite 1
Lihue, Kauai, HI 96766-2000

Dated November 3, 2008

Henry Q Curtis

Henry Q Curtis
VICE PRESIDENT FOR CONSUMER ISSUES
LIFE OF THE LAND